

IN THE CLAIMS:

The following listing of the claims replaces all earlier listings and all earlier versions.

1. ~~LED, in which~~ A light emitting diode, wherein at least one ~~LED light emitting diode die (3)~~ light emitting diode die (3) is arranged on ~~an LED PCB (6)~~ a light emitting diode printed circuit board with a die attach (4) and the ~~LED PCB (6)~~ light emitting diode printed circuit board has, on the side ~~opposite~~ opposite to the ~~LED light emitting diode die (3)~~, rear side contacts (7) which if appropriate are formed as plug contacts, ~~characterized in that wherein~~ the rear side contacts (7) cover over at least ~~the half~~ half the area, preferably the entire area apart from the necessary exceptions, of the ~~LED PCB light emitting diode printed circuit board. (6).~~  
(Fig. 1-3)

2. ~~LED~~ A light emitting diode according to claim 1, ~~characterized in that wherein~~ the rear side contacts (7) are thermally, and if appropriate electrically, connected with the contact areas (~~conductor paths 5~~) on the side of the ~~LED PCB light emitting diode printed circuit board (6)~~ towards the LED die, to the lateral side of the ~~LED PCB light emitting diode printed circuit board.~~ (Fig. 2)

3. ~~LED~~ A light emitting diode according to claim 1, ~~characterized in that wherein~~ the ~~LED PCB (6) light emitting diode printed circuit board~~ is a metal core board and ~~in that wherein~~ the ~~LED light emitting diode die (3)~~ is applied directly on to the metal core. (Fig. 3)

4. ~~LED~~ A light emitting diode according to claim 1, ~~characterized in that wherein~~ the ~~LED PCB (6) light emitting diode printed circuit board~~ is a metal core board and ~~in that wherein~~ there is arranged between the conductor paths and the metal core an electrically non-linear insulator material.

5. ~~LED~~ A light emitting diode according to ~~any of claims 1—4~~ claim 1, ~~characterized in that~~ wherein the ~~LED-die~~ light emitting diode is mounted face down on the LED die.

6. ~~LED~~ A light emitting diode light source having one or more ~~LEDs~~ light emitting diodes according to ~~any of claims 1 to 5~~ claim 1 arranged on a board (9) or on a plug, wherein the board (9) has contact areas (~~conductor paths~~ 8), or the plug has contacts, with which the ~~LEDs~~ light emitting diodes are contacted, ~~characterized in that~~ wherein the rear side contacts (7) of the ~~LEDs~~ light emitting diodes are soldered with the contact surfaces or with the contacts on at least ~~the half~~ half the area of the ~~LED PCB~~ light emitting diode printed circuit board, preferably over the entire area apart from the necessary exceptions.  
(Fig. 1)

7. ~~LED~~ A light emitting diode light source according to claim 6, ~~characterized in that~~ wherein a cooling body (11) is arranged on the rear side of the board (9). (Fig. 1)

8. ~~LED~~ A light emitting diode light source according to claim 7, ~~characterized in that~~ wherein the board (9) and/or the ~~LED-PCT~~ (6) light emitting diode printed circuit board has through-contacts for increasing the thermal conductivity, whereby ~~preferably~~ the through-contacts have a diameter of less than 100 µm.